

cardiac catheterization, measurements of related hemodynamic parameters and EMB. Myocardial norepinephrine (MNEC), epinephrine (MEC), and dopamine (MDC) concentrations were assayed using catechol-O-methyltransferase radioenzymatic method and the obtained values were expressed as ng/g of fresh tissue. The following correlations with LV parameters were found (\*\* $p \leq 0.01$ ):

	BPM			DCM			HCM		
	MNEC	MEC	MDC	MNEC	MEC	MDC	MNEC	MEC	MDC
LVEF	0.34	0.08	-0.02	0.89**	0.86**	0.02	0.71**	0.80**	0.12
LVdp/J	0.33	-0.18	0.09	0.87**	0.74**	0.07	0.80**	0.77**	0.07
LVEDP	-0.09	-0.13	-0.23	-0.79**	-0.75**	-0.11	0.16	0.05	-0.31
PCWP	-0.22	0.17	-0.14	-0.83**	-0.76**	-0.07	0.02	-0.03	-0.17

Furthermore, the comparison of MCC among investigated groups revealed the following differences:

	BPM	DCM	HCM
MNEC	415.4 ± 71.1*	262.2 ± 68.9†	781.0 ± 125.1*
MEC	57.3 ± 4.8*	36.9 ± 7.1‡	91.3 ± 13.1*
MDC	76.6 ± 9.2 ns	72.6 ± 12.1 ns	78.1 ± 9.3 ns

\* $p \leq 0.01$  (BPM vs.DCM); † $p \leq 0.01$  (HCM vs.BPM); ‡ $p \leq 0.01$  (HCM vs. DC).

In conclusion, these data suggest that MNEC and MEC strongly correlate with LV hemodynamic parameters in DCM and HCM, but MDC does not. Moreover, highest MNEC and MEC were demonstrated in the HCM group, while their values were significantly increased in BPM pts in comparison to DCM group.

## 797 PTCA and Stents in Acute Myocardial Infarction

Wednesday, March 19, 1997, 2:00 p.m.-3:30 p.m.  
Anaheim Convention Center, Room A1

2:00

## 797-1 Primary Angioplasty Versus Thrombolysis With tPA in Anterior Myocardial Infarction: Results From a Single Center Trial

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Although the special benefit of primary angioplasty (PA) compared with tPA in patients (P) with anterior myocardial infarction (AMI) observed in a previous trial has been challenged in a larger recent study, no randomized trials have been conducted including only P with AMI. We have recently concluded a study comparing PA with tPA in P with AMI, who were admitted to the hospital no later than 5 h from the onset of pain. A total of 189 P (95 treated with PA and 94 with tPA) were included. Both groups were balanced with similar baseline characteristics. All the P received aspirin (125-325 mg/day). P in the PA group received a bolus of 10,000 IU of heparin followed by 1000 IU/h for 48 h and P in tPA group received only 1000 IU/h for 48 h. The time from onset of pain to treatment was  $214 \pm 7$  minutes for PA and  $198 \pm 7$  for tPA ( $p = NS$ ). Permeability of the infarct related artery (left anterior descending-LAD) was tested in both groups by cardiac catheterization (CC) before discharge. The major adverse events in both groups are the following:

	Mortality	Reinfarction	CVA
PA	3.1%	4.2%	3.2%
T	10.6%	4.2%	0
p	0.04	NS	NS

Recurrent ischemia was present in 14.8% of P treated with PA and 30.8% of P with tPA ( $p = 0.009$ ). Angioplasty of the LAD was performed in 9.5% of P treated with PA and 34% with tPA ( $p < 0.00001$ ). TIMI III at the CC predischARGE was present in 88% of the PA P and 58% of the tPA ( $p = 0.0004$ ), and residual stenosis of the LAD was 34% after PA and 69% after tPA ( $p < 0.00001$ ).

In conclusion: A study conducted only in P with AMI in a single center has proved a reduction in mortality, recurrent ischemia, residual stenosis, and need for revascularization of the LAD in P treated with PA compared with tPA.

## 797-2 What is the Clinical Outcome and Impact of Revascularization of TIMI 2 Flow Following Acute Myocardial Infarction?

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Although TIMI flow grade 2 (FG2) represents suboptimal reperfusion following thrombolysis (T) for acute myocardial infarction (AMI), the associated clinical events and value of routine revascularization (REV) in such patients (pts) are unknown. We evaluated the clinical outcome of 328 pts treated with either t-PA or streptokinase in TIMI 9B who had FG2 in their infarct related artery during initial hospitalization. All pts (ALL) were followed for 30 to 60 days. The post discharge outcome of pts treated with medical therapy (MED,  $n = 110$ , 34%) was compared to pts treated with REV during initial hospitalization ( $n = 218$ , 66%). Of pts treated with REV, 19% had CABG and 81% had PTCA (successful in 87% and partially successful in 7%). Baseline clinical and hemodynamic characteristics were similar in both groups. In hospital mortality was 8 (3.7%) and 1 (0.9%) for REV and MED ( $p = 0.137$ ).

Clinical Outcome From Discharge Through 60 Days

	ALL n (%)	REV n (%)	MED n (%)	p
Death	4 (1.3)	1 (0.5%)	3 (2.8%)	0.118
Re MI	18 (6%)	8 (4%)	10 (9%)	0.050
CHF	2 (0.6%)	2 (1%)	0 (0%)	0.431
Angina	69 (22%)	37 (18%)	32 (29%)	0.017
Readmission for cardiac event	61 (19%)	30 (14%)	31 (28%)	0.003

REV during hospitalization in pts with FG2 following T reduced subsequent ischemic events after hospital discharge.

2:30

## 797-3 A Prospective Multicenter Trial Using the JJIS Heparin-Coated Stent for Primary Reperfusion of Acute Myocardial Infarction

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Primary stenting for acute myocardial infarction is being performed with increasing enthusiasm, however, due to concerns about stent thrombosis, potent antiplatelet, anticoagulants and thrombolytic drugs have been administered to many patients, with resultant increase in hospital stay and cost. The heparin-coated stent decreases platelet deposition by 95% compared to an uncoated stent. We hypothesized that the heparin-coated stent could safely establish reperfusion, eliminate the need for post procedural anticoagulation, and potentially reduce bleeding complications, ischemic events and restenosis compared to other reperfusion strategies. In this 100 patient pilot study, acute MI patients are taken directly to the catheterization laboratory, where predilatation of the infarct-related vessel is performed. If the lumen size is  $\geq 3.0$  mm, one or more heparin-coated stents are placed. If an optimal stent result is achieved (residual stenosis  $<10\%$ , good flow, and absence of residual filling defect or unstented dissection), no additional heparin is given. Thrombolytics, ReoPro and warfarin are avoided. Clinical events are monitored to 6 months, at which time follow-up angiography is performed for determination of reocclusion and restenosis rates. To date, 80 of the anticipated 100 patients have been enrolled, and complete data will be available by March of 1997. This pilot study will be followed by a multicenter, international trial comparing the heparin-coated stent to primary PTCA for acute myocardial infarction.

2:45

## 797-4 Safety and Feasibility of Primary Stenting in Acute Myocardial Infarction - In-hospital and 30 Day Results of the PAMI Stent Pilot Trial

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Primary stenting in AMI has the potential to improve late outcomes compared to primary PTCA. A multicenter, prospective trial was therefore performed in which 300 pts with AMI underwent primary PTCA, followed by stenting in all pts in the absence of contraindications. Pts were excluded only for cardiogenic shock and symptoms  $>12$  hours. Major exclusions for stenting were vessel size  $<2.75$  mm, length  $\geq 3$  stents, giant thrombus, and the expected inability to deliver or expand the stent. Mean age was  $61 \pm 12$